

## EXCERPTS FROM RECENT ITALIAN EYE LITERATURE.\*

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Mr. President, and Members of the Eye and Ear  
Section of the County Medical Society:—

In reviewing the recent Italian Eye Literature of the last few months, I have endeavored to give to you a succinct report of what I deemed would be not only of scientific value, but also of a practical character as well.

I have been fortunate enough to find a sufficient number of articles treating of subjects somewhat allied; so that I am able to give a symposium on external ocular affections.

There were many contributions which although very interesting, I thought best to eliminate on account of the length and abstruse manner of the subject matter presented therein; and they would probably be of less practical value to you than the few that I have elected to give on this occasion. Among these, the first contribution that appeals to me as being of sufficient importance and worthy of mention, is one which treats of a series of interesting researches on the pathology of Trachoma as carried on by Casali of Florence; and, I am of the opinion that any channels of investigation that will bring about a solution of this arduous problem which is still baffling science, deserves our highest appreciation.

### ON THE PRESENCE OF THE CORPUSCLES (BODIES) OF PROWAZEK AND HALBER- STAEDTER IN TRACHOMA AND IN OTH- ER AFFECTIONS OF THE CONJUNCTIVA.

Although it is only since 1907 that Prowazek and Halberstaedter described inclusion of cells in the epithelium of the trachomatous conjunctiva, there have been not a few publications on the subject, which partly confirm and partly contradict all that the above authors have maintained. Notwithstanding this fact, we do not as yet know with certainty what these bodies signify, and there is still some controversy as to their presence more or less frequent in affections non-trachomatous of the conjunctiva, and even in the normal conjunctiva; and for this reason, Dr. Angelo Casali of the University of Florence, with a series of important researches, has offered a new contribution for the solution of this problem, and in answer to the principal questions which at the present time are being agitated regarding the subject, and which are given as follows:

1. The Clamidozoon of the Prowazek and Halberstaedter is specific for trachoma and represents the etiologic factor (as maintained by P. and H., Lindauer, Bertarelli and others).

2. Similar bodies which are found in other affections of the conjunctiva although morphologically the same are biologically different. (Gallenga).

3. In the conjunctivitis of the newborn without any bacteriologic findings in which we find the bodies of P. and H., must come under the heading

of trachoma. (P. and H., Lindauer, Volfrum and others.)

4. The bodies of P. and H. are specific for the affections of the conjunctiva by inclusion, and they do not have any pathological importance for trachoma. (Heyman.)

5. The bodies of P. and H. are nothing more than modified cocci or Neisser, and therefore, trachoma is a disease due to the coccus of Neisser. (Herzog.)

6. These bodies have neither pathologic nor diagnostic importance for trachoma. (Addario, Spoto.)

7. The bodies of P. and H. have a certain diagnostic importance for trachoma. (Brayer, Gruter, Bietti, etc.)

In order to answer these questions, Casali has made studies and researches in one hundred cases, divided as follows:

- 10 cases of chronic trachoma,
- 10 cases of acute trachoma or acute exacerbation,
- 10 cases of follicular conj.,
- 10 cases of acute catarrhal conj. caused by pneumococcus,
- 10 cases of catarrhal conj. caused by the bacillus of Koch-Weeks,
- 10 cases of subacute conj., caused by diplobacillus of Morax-Axenfeld,
- 10 cases of spring catarrh,
- 10 cases of conj. of the newborn caused by coccus of Neisser,
- 10 cases of conj. in adults caused by coccus of Neisser,
- 10 cases of normal conj.

He states that he has found these bodies only in trachoma and in the conj. of Neisser. The figures and percentage are hereby given:

- 6 cases of chronic trachoma, or 60%;
- 7 cases of acute trachoma or acute exacerbation, or 70%.

2 cases of conj. Neisser in the newborn, 20%.

1 case of conj. Neisser in adults, 10%.

In the remaining cases the results were negative.

On this basis he answers the 7 questions as given above as follows:

First, as to whether the Clamidozoon of P. and H. is specific for trachoma, and represents the etiologic factor (as maintained by P. and H., Lindauer, Bertarelli and others), he answers "No."

Second, as to whether similar bodies which are found in other affections of the conj. although morphologically the same are biologically different (Gallenga), he concludes that it can only be viewed as an hypothesis.

Third, as to whether in the conjunctivitis of the newborn without any bacteriologic findings in which we find the bodies of P. and H., must come under the headings of trachoma (P. and H., Lindauer, Volfrum and others), he points out that this hypothesis does not explain why we find these trachoma bodies in diseases which have nothing to do with trachoma.

Fourth, as to whether the bodies of P. and H. are specific for the affections of the conjunctiva by inclusion, and they do not have any pathological importance for trachoma (Heyman), he finds that these are mixed infections, and that trachoma and

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the conj. of Neisser can accompany one another alternately.

Fifth, as to whether the bodies of P. and H. are nothing more than modified cocci of Neisser, and therefore trachoma is a disease due to the coccus of Neisser, he answers that the opinion of Herzog is against himself, inasmuch that in a series of 20 cases of infection by the coccus of Neisser, he observed trachoma bodies in three.

Sixth, as to whether these bodies have neither pathologic nor diagnostic importance for trachoma (Addario, Spoto), he claims that their opinion is a little far fetched, and

Seventh, as to whether the bodies of P. and H. have a certain diagnostic importance for trachoma (Brayer, Gruter, Bietti, etc.), he also claims that if it is disputable that these so-called clamidozoa of trachoma are the real agents of this malady, his researches authorize him to maintain that they constitute by their presence a very important diagnostic factor. As they were never found in any of the conjunctivites such as the follicular spring catarrh, acute catarrh with hypertrophy of the papilla.

In questioning himself as to whether the bodies of trachoma are real organisms or represent products of secretion of the cell as maintained by Addario, he is inclined to admit rather the first than the second hypothesis, which is in keeping with the ideas of Lindauer and Heyman; and having found the nuclei of a binucleated cell invaded by the bodies of P. and H., in a condition of kariokinesis, he drifts away from the theory of Fleming that they are microorganisms, which are found as parasites in the different desquamating catarrhs of the mucous membrane; and he concludes that from believing that these bodies are true pathogenic micro-organisms, to recognizing them as specific agents of trachoma. There is a great difference, and he is rather inclined to the opinion of Heyman which is more nearly correct, that their presence in trachoma, and the conj. of Neisser, that it is a mixed infection; an opinion which is also supported by Noguchi, Bretti, and Betti.

Having presented the pathological contribution of trachoma, I have thought it advisable to submit a surgical contribution by Piccaluga of the University of Turin, for a new and rational method for the cure of Entropion and Trichiasis of the upper lid. The method is as follows:

1. (a) Make an incision parallel to the margin of the lid and 3 m. m. from it, extending from the int. canthus to the ext. canthus, including the skin and orbic muscle.

- (b) Make a similar incision parallel to the first, and 3 m. m. above it, so that there is formed a musculo-cutaneous bridge attached at both extremities.

- (c) Dissect from the tarsus the above musculo-cutaneous bridge. Below the bridge loosen the skin at the margin of the lid as far as the cilia. Above this bridge loosen as far as the insertion of the Levator Palpebrae.

2. Resection of Tarsus parallel to margin of the lids at point of greatest curvature, and down to the conj. and including it.

3. Four silk-sutures are taken in the form of a

loop, and from each other. Each suture is armed at both ends with curved needles. One is inserted under the fibrous tissue of the Levator tendon and Tarsal ligament, at the point where it is inserted into the Tarsus. It is then brought out immediately at the anterior surface, making a narrow plica, and then passing in front of the Tarsus, and above the musculo-cutaneous bridge through the skin of the margin of the lid from behind forward, so that it comes out above the insertion of the eyelash. With the other needle proceed as above at a distance of 1 m. m. from the first, making thereby a loop, which has its central point fixed at the Levator tendon, and the ends of the sutures appear at the margin of the lid. The other three loops are disposed of in the same manner.

It is necessary to see that the small cutaneous bridge is caught between the sutures and the Tarsus, otherwise the effect of the pressure on the convex surface of the Tarsus would fail. The ends are tied with a bead in order to avoid necrosis of the skin.

The skin of the upper and lower margins are brought together by sutures. He applies a collodion dressing in order to fasten them to the frontal region.

The author applies the same operation for the correction of spasmodic entropion of the lower lid.

In the field of Ocular Therapeutics I refer to contributions, one on the use of Jequiritine in Malignant Growths.

In several of the Italian Clinics much has been done with the application of Jequiritine after the method of Rampoldi of the University of Pavia, in cases of rodent ulcers and Epitheliomata of the eye. The author applies it in small discs in ascending doses directly to the affected part. A quite violent reaction is set up; a heavy scab is formed which discharges, and is thrown off in a few days.

This occurs several times before complete healing is obtained, and it seems to have given most excellent and permanent results, and all who have used it in these cases, judging from recent literature, seem to be very enthusiastic about it.

Guaita of Florence has made considerable use and attained good results with the use of Scarlet Red, and a 3% salve in cases of Epitheliomata of the conj. He curetted the growth slightly and applies the ointment. For growths on the lids he uses 8%, but where he has found it of incalculable value has been as a cicatrizing agent after cataract operation, where the anterior chamber does not form on account of the margins of the incision failing to heal rapidly. The formula used is that of Kragca, and is as follows:

8 grams of Scarlet Red are triturated with oil and chloroform until the latter is evaporated, and then vaseline is added to make 100 grams.

In the field of Ocular Bacteriology an important contribution has been made by Verderame, who has discovered a new scarina that has not as yet been described. Its characteristic features are that it is gram-negative. It develops in all cultural media at the temperature of the body. It is facultative anaerobic, liquefies Loeffler's blood serum but not gelatine, does not coagulate milk, causes slight de-

velopment of  $H_2S$ , causes fermentation of maltose, levulose, etc. There is an absence of mobility, spores and filaments, and given its property to form a lemon yellow pigment in all cultural media, he has given it the name of *Scarcina citrea conj.*, not to be confounded with the *Scarcina citrina*, which has entirely different properties.

From experiments made, he finds that it is found in the conj. with other cocci and bacilli; but that it has no special pathogenic importance for the human being, which is in keeping with all other *scarcina* thus far described; with the exception of that described by Nagano, which was only pathogenic for rat and rabbit.

### A CASE OF MALIGNANT EDEMA.\*

By JAMES EAVES, M. B., Ch. B. Edin., Lane Hospital, San Francisco.

On account of the unusual symptoms and difficulties in diagnosis I decided to present this case, thinking it might have an interest to those who had not seen it. Not to trespass too much on your time I will direct your attention to the principal points the case presents.

Patient D. G. (Dairyman), age 37. Family history, etc., negative.

**Present History:** Ten days ago patient assisted in skinning one of three cows. These cows had died the previous day of an unknown disease. As far as the patient remembers they displayed no symptoms before death, being apparently well and had no subcutaneous glandular enlargements. Five days ago the patient noticed three pimples on his left wrist; one over the dorsal aspect, one on the volar surface and one over the distal articular end of the radius. The following day patient noticed swelling commencing in the region of the wrist, extending to the hand a few hours later. Two days later the swelling extended to the forearm.

**Pain:** first set in two days after the swelling commenced and was in the arm entirely, being steady and sharp in character. Pain is not increased on slight movement.

The upper limb has a tense hot feeling to the patient.

When the swelling first commenced, patient applied a hot flax-seed poultice, which was followed by a serous bloody exudate from the pimples.

**Physical Examination:** Patient a well nourished man of 37 years. Facies pale and somewhat anxious. Left upper limb and hand swollen to about twice the normal size, being tense and brawny. On the volar surface are numerous bluish black blebs, averaging about a centimeter in diameter, raised from the surrounding surface about 1 cm. These blebs are not distinct from one another, their borders fusing and following in a general way the natural folds of the wrist. On the medial surface of the forearm and extending up on to the anterior surface are about 30 blebs averaging about  $1\frac{1}{2}$  cm. in diameter, hemispherical, pale, transparent and containing presumably a clear serous fluid. Movement of the elbow is only limited by the swelling, pain on attempted movement being very slight.

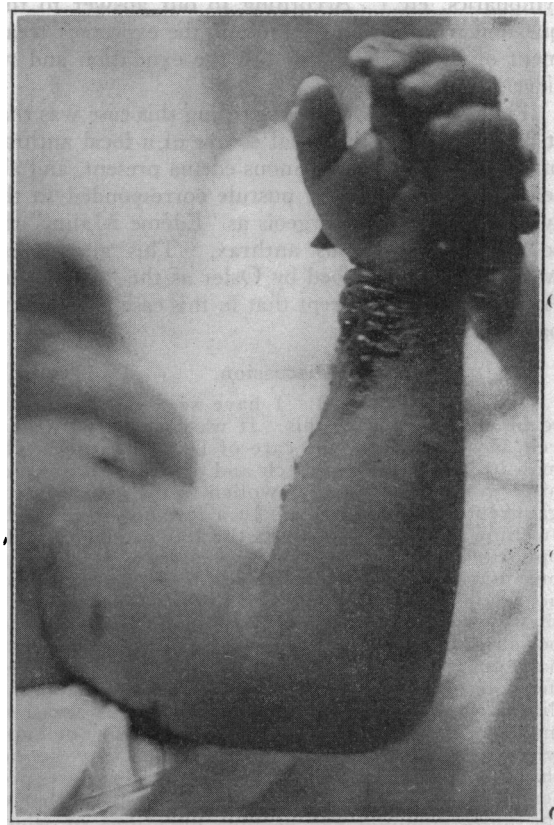
Glands: epitrochlear, axillary, etc., not palpable. Palpation: no crackling but marked pitting on pressure, the patient complaining of pain.

**Edema:** since admission becoming markedly increased, extending to shoulders and chest.

**Operation:** by Dr. Stanley Stillman, at 5:30 the same day of admission. Tissues freely incised to deep fascia. Edema extending to a depth of three inches. No pus. Clear, watery fluid exuding. No glandular enlargements evident. Hot boracic fomentations applied and whole upper limb soaked in a bath of 1-10,000 bichloride 1 hour in 3.

**Progress of the case:** Pulse and temperature on the first day little affected. Second day, weak and rapid pulse and rise of temperature to  $102^\circ$ , remaining so until the end.

**Visits:** On repeated visits the patient was pale and anxious. Later stages exhibited a picture of collapse.



Before Operation.

Morning of demise pulse could not be felt. Patient did not seem entirely conscious and died in the early hours of the morning with no respiratory difficulty the eighth day of disease.

**Postmortem Findings:** The points at autopsy that I think of chief importance are the following: Edema extended down between the muscles to bone; no gas; axillary lymph nodes swollen, the largest being about the size of a small hazel nut; no hemorrhages.

**Bacteriological Report:** Fluid taken from blebs on wrist time of admission—fluid taken from incised wounds, etc., all negative. *Bacillus of anthrax* first isolated from smears from the axillary nodes.

\* Read before the Cooper College Science Club, Nov. 6, 1911.